

We Claim:

1. A sheet-processing machine, comprising:

a blast or blown-air supply system; and

a pneumatic sheet-guiding device connected to said blast or blown-air supply system;

said sheet-guiding device having flow ducts for aligning sheet-carrying air flows;

said sheet-guiding device having a sheet-guiding surface;

said sheet-guiding surface having air passage openings formed therein for sheets being dragged over said air passage openings in a sheet travel direction and for expelling said sheet-carrying air flows during operation;

said air passage openings in said sheet-guiding surface forming opening cross-sections of said flow ducts, said opening cross-sections being slots having a length and a width, said length being many times greater than said width.

2. The machine according to claim 1, further comprising guide vanes provided in said flow ducts.

3. The machine according to claim 1, wherein said slots are disposed symmetrically with respect to a line of symmetry.
4. The machine according to claim 1, wherein said air passage openings are waste-air openings assigned to said slots.
5. The machine according to claim 4, wherein said waste-air openings are waste-air slots.
6. The machine according to claim 4, wherein said waste-air openings, on a side of said sheet-guiding device facing away from said sheet-guiding surface, are in communication with the atmosphere.
7. The machine according to claim 4, further comprising a vacuum generator for acting upon said waste-air openings.
8. The machine according to claim 1, wherein said air passage openings are purging air openings for discharging purging air flows, said purging air openings being disposed in regions wherein said sheet-carrying air flows produce a vacuum when purging air flows are lacking.
9. The machine according to claim 1, wherein said air passage openings are supporting-air openings for discharging supporting air flows, said supporting-air openings being

disposed in regions wherein said sheet-carrying air flows produce maximum vacuum when supporting air flows are lacking.

10. The machine according to claim 1, wherein said slots are inclined with respect to said sheet travel direction.

11. The machine according to claim 1, wherein said slots are oriented in said sheet travel direction.

12. The machine according to claim 1, wherein said slots have a width varying along the length thereof.

13. The machine according to claim 1, wherein said slots have a variable width.

14. The machine according to claim 1, wherein said slots are respectively disposed repeatedly on both sides of a line of symmetry extending in said sheet travel direction, said line of symmetry having a central location with respect to said sheet guiding surface.

15. The machine according to claim 14, wherein said slots have different lengths.

16. The machine according to claim 1, wherein said blast-air supply system has chambers respectively communicating with said slots.

17. The machine according to claim 1, further comprising a multiple configuration of said slots to be acted upon individually with blast air.

18. The machine according to claim 1, further comprising waste-air openings and blowers assigned to said slots and having suction sides communicating with said waste-air openings and pressure sides communicating with said slots.

19. The machine according to claim 2, further comprising throttles or restrictors disposed in said flow ducts.

20. The machine according to claim 19, wherein said throttles or restrictors are formed of air-permeable material.

21. A rotary printing press, comprising:

a blast or blown-air supply system; and

a pneumatic sheet-guiding device connected to said blast or blown-air supply system;

said sheet-guiding device having flow ducts for aligning sheet-carrying air flows;

said sheet-guiding device having a sheet-guiding surface;

said sheet-guiding surface having air passage openings formed therein for sheets being dragged over said air passage openings in a sheet travel direction and for expelling said sheet-carrying air flows during operation of the rotary printing press;

said air passage openings in said sheet-guiding surface forming opening cross-sections of said flow ducts, said opening cross-sections being slots having a length and a width, said length being many times greater than said width.